PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY	PCT
Freundallse 13	NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT OR THE DECLARATION OR THE DECLARATION (POT Rule 44.1)
20%	Date of mailing [day/month/year] 19/04/2004
Applicant's or agent's file reference 3629-2 PCT-1	FOR FURTHER ACTION See paragraphs 1 and 4 below
International application No.	International filing date
PCT/EP 03/14234	(day/month/year) 15/12/2003
Applicant IVONEX GMBH	
1. R The applicant is hereby notified that the International Search Filling of amendments and statement under Article 19: The applicant is entitled, if he so wishes, to amend the claim When? The time limit for filling such amendments is norma international Search Report; however, for more de Where? Directly to the International Bureau of WIPO 34, chemin des Colomboties 1211 Geneva 20, Switzerland Fascimile No.: (41-22) 740.14.35 For more detailed instructions, see the notes on the accordance 17(2)(a) to that effect is transmitted herewith.	is of the International Application (see Rule 46): Ily 2 months from the date of transmittal of the tails, see the notes on the accompanying sheet.
*3. With regard to the protest against payment of (an) addition the protest together with the decision thereon has been applicant's request to forward the texts of both the protest. no decision has been made yet on the protest; the applicant's request to the protest of the protest.	n transmitted to the international Bureau together with the est and the decision thereon to the designated Offices.
4. Further action(s): The applicant is reminded of the following: Shortly after 18 months from the priority date, the international applit the applicant wishes to avoid or postpone publication, a notice priority claim, must reach the international Bureau as provided is completion of the technical preparations for international publical Within 19 months from the priority date, a demand for international wishes to postpone the entry into the national phase until 30 mo. Within 20 months from the priority date, the applicant must perfor before all designated Offices which have not been elected in the	of withdrawal of the international application, or of the n Rules 90bis.1 and 90bis.3, respectively, before the tion. If preliminary examination must be illed if the applicant nins from the priority date (in some Offices even later). If the prescribed acts for entry into the netional phase is demand or in a later election within 19 months from the
priority date or could not be elected because they are not bound	by Chapter II.

NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PUT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the International application. It should however be emphesized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no read to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some Ctates only.

What parts of the international application may be amended?

Under Article 19, only the claims may be amended

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

When?

Within 2 months from the date of transmitted of the international search report or 16 months from the priority date, whichever time limit expires later, it should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 45.1).

Where not to file the amendments?

The amendments may only be filed with the international Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a domand for informational proliminary examination has been is filed, see below.

How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement shoot must be submitted for each shoot of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

What documents must/may accompany the amendments?

Letter (Section 205(b)):

The emendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the eccempanying letter:

- [Where originally there were 48 claims and after amendment of some claims there are 51];
 "Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers;
 claims 30, SS and 36 unchanged; new claims 49 to 51 added."
- [Where originally there were 15 claims and after amendment of all claims there are 11]:
 "Claims 1 to 15 replaced by amended claims 1 to 11."

"Claims 7 to 19 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."

- (Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims):
 "Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or
- 4. [Where various kinds of amendments are made]: "Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under article 19(1)" (Rule 46.4)

The amendments may be eccompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

E must be in the language in which the international appplication is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filled and as amended. It must be filled on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an emendment of that claim.

Consequence if a demand for international proliminary examination has already been filled

If, at the time of filing any amendments under Article 19, a domand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the international Bureau, also file a copy of such amendments with the international Preliminary Examining Authority (see Rule 52.2(a), first sentence).

Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/clocked Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Quide.

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PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER SEE Notification (Form PCT/ISA)	of Transmittal of International Search Report 220) as well as, where applicable, Item 5 below.
3629–2 PCT–1 International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)
PCT/EP 03/14234	15/12/2003	19/12/2002
Applicant	22, 12, 211	
- Дриоми		
IVONEX GMBH		
TVOILE CALLET		
This international Search Report has been according to Article 18. A copy is being tra	n prepared by this international Searching Au unsmitted to the international Bureau.	thority and is transmitted to the applicant
This International Search Report consists It is also accompanied by	of a total of 4 sheets. a copy of each prior art document cited in thi	e report.
1. Basis of the report		
a. With regard to the language, the language in which it was filed, unl	international search was carried out on the ba ess otherwise indicated under this item.	asis of the international application in the
the international search w Authority (Rule 23.1(b)).	as carried out on the basis of a translation of	the international application furnished to this
With regard to any nucleotide any was carried out on the basis of the	d/or amino acid sequence disclosed in the eequence listing :	International application, the international search
. —	nal application in written form.	
flled together with the inte	mational application in computer readable to	rm.
furnished subsequently to	this Authority in written form.	
	this Authority in computer readble form.	
the statement that the sui international application a	osequently turnished written sequence listing is filed has been furnished.	does not go beyond the disclosure in the
the statement that the info furnished	ormation recorded in computer readable form	Is identical to the written sequence listing has been
2. Certain claims were fou	nd unsearchable (See Box I).	
3. Unity of invention is lac	king (see Box II).	
4. With regard to the title,		•
i — ·	ibmitted by the applicant.	
X the text has been establis	shed by this Authority to mad as follows:	
METHOD FOR THE SEDARA	TION OF CELL FRACTIONS	
5. With regard to the abetract,		
	ubmitted by the applicant.	oder or lengance is Boy (I) The england may
the text has been established within one month from the	shed, according to Aule 38.2(b), by this Authored date of malling of this international search re	orly as it appears in Box III. The applicant may, apport, submit comments to this Authority.
6. The figure of the drawings to be pub	liched with the abstract is Figure No.	
as suggested by the app	jeant.	X Nane of the figures.
because the applicant fai		
because this figure bette	r characterizes the invention.	

- INTERNATIONAL SEARCH REPORT

International Application No PCT/EP 03/14234

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 C12N5/06 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system rotiowed by classification symbols) $IPC\ 7\ C12N\ C12Q$

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, MEDLINE, BIOSIS

Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	
SABILE A ET AL: "Efficiency of Ber-EP4 antibody for isolating circulating epithelial tumor cells before RT-PCR detection." AMERICAN JOURNAL OF CLINICAL PATHOLOGY.	1-8. 10-18	
vol. 112, no. 2, August 1999 (1999-08), pages 171-178, XP009028763 ISSN: 0002-9173 abstract page 171. column 2, paragraph 2 - last		
יו של מקו מקוו	1-8, 10-18	
-/		
	SABILE A ET AL: "Efficiency of Ber-EP4 antibody for isolating circulating epithelial tumor cells before RT-PCR detection." AMERICAN JOURNAL OF CLINICAL PATHOLOGY. UNITED STATES AUG 1999, vol. 112, no. 2, August 1999 (1999-08), pages 171-178, XP009028763 ISSN: 0002-9173 abstract page 171, column 2, paragraph 2 - last paragraph	

Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
Special categories of cited documents: A document defining the general state of the an which is not considered to be of particular relevance E earlier document but published on or after the international filing date L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another claims or other special reason (as specified) O document referring to an oral disclosure, use, exhibition or other means P document published prior to the international filing date but but than the priority date dairmed	'T' later document published after the informational filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention. 'X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken above. 'Y' document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. '8' document member of the same patent family
Date of the actual completion of the international search	Date of malling of the international search report
7 April 2004	19/04/2004
Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5616 Patentiaan 2 NL – 2280 HV Rigswijk Tel. (+31-70) 340-2040, Tx. 31 551 epo nl Fax (+31-70) 340-3016	Schmitt, C

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' ' INTERNATIONAL SEARCH REPORT

International Application No PCT/EP 03/14234

tion) DCCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages	
Citation of document, with indication, where appropriate, of the relevant passages	
	Relevant to claim No.
ATKIN S L ET AL: "Hypotonic lysis of red blood cell contamination from human anterior pituitary adenoma cell preparations" IN VITRO CELLULAR AND DEVELOPMENTAL BIOLOGY ANIMAL, vol. 31, no. 9, 1995, pages 657-658, XP009028640 ISSN: 1071-2690 page 657, column 1, paragraph 1 -column 2, paragraph 1	1-3,5-7, 11
page 007, 100700 1 0	1-8, 10-18
US 2002/012931 A1 (DESNOYERS RODWIGE ET AL) 31 January 2002 (2002-01-31) cited in the application claims 1,4,9,13,16 paragraphs '0011!,'0012!,'0026!,'0032!,'0034!,'0036!,'0040!,'0046!	1-8, 10-18
HARVEY B M ET AL: "Random prime labeling of DNA probes with fluorescein-11-dUTP." METHODS IN MOLECULAR BIOLOGY (CLIFTON. N.J.) UNITED STATES 1994, vol. 28, 1994, pages 93-100, XP001180318 ISSN: 1064-3745 page 95	19-21, 23,24
US 6 232 086 B1 (PASTAN IRA ET AL) 15 May 2001 (2001-05-15) column 2, line 55 - line 61 column 20, line 58 -column 21, line 5	19-23,25
	blood cell contamination from human anterior pituitary adenoma cell preparations" IN VITRO CELLULAR AND DEVELOPMENTAL BIOLOGY ANIMAL, vol. 31, no. 9, 1995, pages 657-658, XP009028640 ISSN: 1071-2690 page 657, column 1, paragraph 1 -column 2, paragraph 1 page 657; tables 1-3 US 2002/012931 A1 (DESNOYERS RODWIGE ET AL) 31 January 2002 (2002-01-31) cited in the application claims 1,4,9,13,16 paragraphs '0011!,'0012!,'0026!,'0032!,'0034!,'0036!,'0040!,'0046! HARVEY B M ET AL: "Random prime labeling of DNA probes with fluorescein-11-dUTP." METHODS IN MOLECULAR BIOLOGY (CLIFTON. N.J.) UNITED STATES 1994, vol. 28, 1994, pages 93-100, XP001180318 ISSN: 1064-3745 page 95 US 6 232 086 B1 (PASTAN IRA ET AL) 15 May 2001 (2001-05-15) column 2, line 55 - line 61

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No. PCT/EP 03/14234

Patent document cited in search report	Publication date		Patent family member(s)	Publication date
US 2002012931	31-01-2002	AU	4950301 A	08-10-2001
		AU	4950401 A	08-10-2001
		ΑU	4954801 A	08-10-2001
		CA	2404428 A1	04-10-2001
		CA	2404431 A1	04-10-2001
		CA	2404432 A1	04-10-2001
		EP	1268854 A1	02 - 01-2003
		EP	1272665 A1	08-01-2003
		ΕP	1274861 Al	15-01 - 2003
		JP	2003535580 T	02-12-2003
		JP	2003528628 T	30-09-2003
		JP	2003532389 T	05-11-2003
		WO	0173131 A1	04-10-2001
		WO	0173132 A1	04-10-2001
		WO	0173133 A1	04-10-2001
		US	2004033520 A1	19-02-2004
		US	2001036635 A1	01-11-2001
		US	2001039016 A1	08-11-2001
		US	2001029019 A1	11-10-2001
		US	2001039017 A1	08-11-2001
		ЦS	2001029020 A1	11-10-2001
US 6232086 B1	B1 15-05-2001	US	6072031 A	06-06-2000
		us	5759782 A	02-06-1998
		AU	6269896 A	30-12-1996
		WO	9640713 A1	19-12-1996